

providing a continuous web of heat-sealable plastic material extending lengthwise with opposing edge portions;

folding the web longitudinally;

continuously moving the web in a forward direction during the folding step;

sealing the edge portions of the web to form a longitudinal hermetic seal, thereby defining a continuous tube;

inserting the cheese into the tube;

flattening the tube after the cheese is inserted to form a continuous flat ribbon of the cheese disposed within the flattened tube;

urging portions of the flattened tube together at predetermined intervals to define a plurality of cross-sealing zones, and applying sufficient pressure at the cross-sealing zones to eliminate substantially all of the cheese from the cross-sealing zones; and

heating the cross-sealing zones for a period of time and at a temperature sufficient to hermetically seal the cross-sealing zones to form, with the longitudinal hermetic seal, hermetically sealed individual packages entirely enclosing individual slices of the cheese.

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23. The process of Claim 22, wherein the web is continually moved in a forward direction during the sealing of the edge portions of the web and during the formation of the cross-seals, at

a rate sufficient to produce in excess of 700 hermetically sealed individual cheese packages per minute.

<sup>16</sup>  
24. The process of Claim <sup>14</sup>22, wherein the web is continually moved in a forward direction during the sealing of the edge portions of the web and during the formation of the cross-seals, at a rate sufficient to produce in excess of approximately 1000 hermetically sealed individual cheese packages per minute.

<sup>17</sup>  
25. The process of Claim <sup>14</sup>22, further comprising the step of cooling the web after the web is flattened and before the cross-seals are formed.

<sup>18</sup>  
26. An apparatus for packaging a cheese formulation into individual slices, comprising:

a device for folding a web of thermoplastic material extending lengthwise with opposing edge portions, the web having a width defined by the distance the web extends transverse to its length;

a longitudinal sealing station that continuously seals the edge portions of the web to form a longitudinal hermetic seal, thereby defining a continuous tube;

means for inserting the cheese into the tube;

a device for flattening the tube after the cheese is inserted to form a continuous flat ribbon of the cheese disposed

within the flattened tube;

a cross-sealing station disposed downstream of the longitudinal sealing station for urging portions of the flattened tube together at predetermined intervals to define a plurality of cross-sealing zones extending across the entire web width and separating adjacent cheese slices, for applying sufficient pressure at the cross-sealing zones to eliminate substantially all of the cheese from the cross-sealing zones, and for heating the cross-sealing zones for a period of time and at a temperature sufficient to hermetically seal the cross-sealing zones to form, with the longitudinal hermetic seal, hermetically sealed individual packages entirely enclosing individual slices of the cheese; and

means for continuously conveying the web in a forward direction from the longitudinal sealing station to the cross-sealing station.

*19*  
*27* 27. The apparatus of Claim *18* ~~26~~, further comprising means for cooling the web after the web is flattened and before the cross-seals are formed.

*20*  
*28* 28. The apparatus of Claim *19* ~~27~~, wherein the means for cooling the web includes a tank containing water at a temperature of approximately between 32°F and 50°F.

*21*  
*29* 29. The apparatus of Claim *18* ~~26~~, wherein the thermoplastic

material includes polypropylene.

<sup>29</sup>  
~~30~~. The apparatus of Claim <sup>18</sup>~~26~~, wherein the temperature used to hermetically seal the cross-seals is between about 230°F and 240°F.

<sup>23</sup>  
~~31~~. The apparatus of Claim <sup>18</sup>~~26~~, wherein the length of each cross-seal between adjacent cheese slices is approximately one-quarter inch.

<sup>24</sup>  
~~32~~. The apparatus of Claim <sup>18</sup>~~26~~, wherein the cross-sealing station includes a first and a second series of sealing members, with at least some of the first series sealing members being heated, and the second series of sealing members comprising a resilient material.

<sup>25</sup>  
~~33~~. The apparatus of Claim <sup>18</sup>~~26~~, wherein the apparatus is capable of producing in excess of 700 hermetically sealed individual cheese packages per minute.

<sup>26</sup>  
~~34~~. The apparatus of Claim <sup>18</sup>~~26~~, wherein the apparatus is capable of producing in excess of approximately 1000 hermetically sealed individual cheese packages per minute.